

SUB B27

9. A method as in claim 8, wherein the step (a) of associating shorthand links comprises
- 2 the steps of:
- 3 i) creating a list of files at said remotely connected location; and
- 4 ii) selecting and associating an unused key with each listed file.

### IN THE SPECIFICATION

Replace the paragraph starting on page 6 line 17 with the following replacement paragraph:

Figure 2 shows a flow diagram 120 of the steps in registering URLs with the server according to the preferred embodiment of the present invention. First, in step 122, the server receives a request from a site owner or, from any web user, to register one or more URLs. Then for each URL, in step 124, the server selects an unused key or shorthand code. Preferably, keys are selected to be as short as is practicable, without being exposed to accidental discovery or to correct, automatically, erroneous entries. With this goal, keys are selected to be sufficiently different from each other such that a number of single character changes are necessary to convert one key to another one. In step 126, the unused key is entered into the registry database 108 as corresponding to one of the URLs. Also, these short keys may be embedded as hyperlinks in web pages, included in e-mail, and stored in devices with limited storage such as a PDA.

### OBJECTION

In response to paragraph 3 of the Office Action, Applicants amend claim 9 to properly depend on claim 8. The Examiner's stated assumption that claim 9 is further limiting to the subject matter of claim 8 is correct.

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## **REJECTIONS UNDER 35 U.S.C. 112 SECOND PARAGRAPH**

In response to paragraph 4 of the Office Action, Applicants respectfully traverse the rejections under 35 U.S.C. 112 second paragraph. The term “shorthand link” is described in detail in the specification. Page 1 lines 15-17 states “A web page may include one or more Hypertext links or Hyperlinks, each to a Universal or Uniform Resource Locator (URL) that points to a file at an Internet location.” Page 2 lines 1-2 and 8-9 of the specification describe how large unwieldy URLs may become troublesome in some situations. In describing a first preferred embodiment, the specification states on page 5 line 22 to page 6 line 3 that an entity registers code with a code server that maintains a shorthand database, and “The registered codes, which correspond Uniform Resource Locators (URLs) for the entity, are mapped in one-to-one fashion to shorthand codes. When a web browser at one of the remotely connected computers 102, 104, 106 requests access to one of the shorthand codes, the server redirects the web browser to the true URL”. Page 2 lines 8-13 teach associating an original URL with a short or compact code, e.g. “Qa2yZ”, and that a “more compact” URL (e.g. <http://codes.server.com?key=Qa2yZ> ) may be requested as a substitute for the original URL. Page 6 lines 20-23 describe the desirable properties of the keys or shorthand codes used by the present invention. Page 7 lines 1-3 teach “Also, these short keys may be embedded as hyperlinks in web pages, included in e-mail, and stored in devices with limited storage such as a PDA.”

The specification goes on to describe a second preferred embodiment, beginning at page 7 line 13. In this embodiment, shorthand codes corresponding to each file’s path and location are assigned individually to the URLs at the participating domain. As stated in lines

22-24, "So, for the domain sontimes.com, the file output/novak/novak20.html may be associated, more compactly with A2gd. The URL http://www.sontimes.com/A2gd would be redirected to the appropriate file." Page 8 lines 7-16 describe the steps in retrieving a file associated with a particular shorthand URL (or link), including noting that the domain portion of the shorthand URLs (e.g. http://codes.server.com ) is the same for all shorthand URLs, so that only the shorthand part (e.g. Qa2yZ) needs to be stored or transmitted to refer to the original URL.

### **REJECTIONS UNDER 35 U.S.C. 102(e)**

In response to paragraph 6 of the Office Action, Applicants respectfully traverse the rejections under 35 U.S.C. 102(e). Remarks below regarding claims 1-7 apply to all the claims; claims 8-13 have been rejected on the same basis as claims 1-7, and claims 14-26 have been rejected on the same basis as claims 1-13 with the exception of computer readable program code means.

Stern teaches a web crawler that processes web pages (e.g. a subset of a particular web site) to collect and extract information about people and organizations. The internal links of a web site are recorded in a links-to-visit table, i.e. Stern identifies web pages that are in a given web site that are to be subsequently crawled and processed. These pages may be manually accessed by a clicking on a graphic or a string of text ("link text") that is often differently colored and underlined in a web page (see page 2 paragraph 29) to trigger navigation to a target URL (page 2 paragraph 29). FIG. 3 lists original URLs and corresponding link texts. Stern also teaches the ability to select internal links-to-visit according to keywords; for example, if a script extracts a quoted phrase ending in ".ASP", ".HTM", or ".HTML", that quoted phrase may be treated as an internal link (page 3

paragraph 55). Stern also maintains a database storing a variety of information about various web sites.

However, Stern does not provide links as taught and claimed by the present invention. Stern fails to teach searching a database for a shorthand link associated with a URL responsive to selection of a shorthand link (emphasis added) e.g. by a user of a web browser. The shorthand link of the present invention is not the same as the conventional graphic or "link text" described by Stern but is instead a new compact way of solving the problems that may arise with large unwieldy URLs. For example, as stated on page 2 lines 8-19, handling conventional URLs with limited resources (such as web browsers running on wireless web appliances) can become troublesome without a compact means for specifying Internet resource locations. Stern uses a unique identifier for a web site to prevent duplicate processing of a web site that has previously been processed, but this identifier is available only to Stern's internal database, and is not provided externally.

All pending claims are believed to be allowable as amended. References cited but not used as the basis of rejections have been reviewed. The Examiner is invited to call Applicant's undersigned representative if a telephone conference will expedite the prosecution of this application.

Respectfully submitted,

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